

TILSLEY
Appl. No. 09/622,810
April 30, 2004

AMENDMENTS TO THE CLAIMS:

Please cancel without prejudice claims 1, 3, 5, 7 and 8 and add newly written claims 9-17 as follows.

This listing of claims will replace all prior versions, and listings, of claims in the application:

1-8. (*Cancelled*)

9. (New) A surveillance system comprising:

(a) a first camera, positioned to have a field of view of a surveillance area, for providing images of said surveillance area,

(b) a second camera for providing a higher quality image of at least a portion of the surveillance area,

(c) an image processing means for making a qualitative assessment of the images provided by said first camera and for causing, when the image quality is inadequate, operation of said second camera to provide a higher quality image of said portion of the surveillance area requiring further analysis,

(d) a data-base comprising at least one data-base source from the group comprising human operators, rule based systems, knowledge based systems, artificial intelligence systems, data-bases and algorithms, and

(e) an image analysis means for

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analyzing the content of said higher quality images from said second camera with reference to said data-base means,

assessing whether any further analysis of the content of said higher quality images from said second camera is required, and

controlling said second camera to provide further image information of any part of said surveillance area requiring further analysis.

10.(New) A surveillance system, as in Claim 9, wherein said image analysis means further includes means for:

analyzing the content of said images from said first camera with reference to said data-base,

assessing whether any further analysis of the content of said images from said first camera is required, and

controlling at least one of said cameras to provide further image information of any part of said surveillance area requiring further analysis.

11.(New) A surveillance system, as in Claim 9, including:

at least one additional imaging means from the group comprising conventional radar, synthetic aperture radar, infra-red imaging systems, millimetric wave imaging systems, acoustic systems and magnetic systems, and

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said image analysis means is additionally arranged to demand further image information from said additional imaging means.

12.(New) A surveillance system, as in Claim 9, wherein said image processing means is pre-programmed to request further analysis of any image having a feature taken from the group comprising certain pre-determined events, features, sequences of actions and images.

13.(New) A surveillance system, as in Claim 12, wherein said image processing means is pre-programmed by said data-base.

14.(New) A surveillance system, as in Claim 12, wherein said image analysis means is pre-programmed to determine a control function response to any image having one of said features.

15.(New) A surveillance system, as in Claim 9, wherein said image analysis means includes a self-learning means for identifying at least one of a pattern of events and pattern of behavior in a previous sequence of said images that has already been analyzed and regarded as unimportant, and for eliminating said at least one unimportant pattern of events and pattern of behavior from further analysis by said image analysis means.

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16.(New) A surveillance system, as in Claim 9, wherein said image analysis means includes an artificial intelligence means for identifying one of a pattern of events and pattern of behavior in a previous sequence of said images that has already been analyzed and regarded as unimportant, and for eliminating said at least one unimportant pattern of events and pattern of behavior from further analysis by said image analysis means.

17.(New) A surveillance network comprising a plurality of surveillance systems, as in Claim 9, with each of said first cameras positioned to have a field of view of a portion of a combined surveillance area whereby each of said first cameras provide images of said combined surveillance area, each of said second cameras provide more detailed images of at least a portion of said combined surveillance area thereby enabling an object to be monitored and tracked continuously within said combined surveillance area, and a control means for handing over tracking of said object from one of said cameras covering one portion of said combined surveillance area to another of said cameras covering an adjoining portion of said combined surveillance area thereby ensuring continuity in the surveillance of said object.